



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/749,761

12/31/2003

Paul T. Van Gompel

20,240

9121

23556 7590 03/22/2007  
KIMBERLY-CLARK WORLDWIDE, INC.  
401 NORTH LAKE STREET  
NEENAH, WI 54956

EXAMINER

CHAPMAN, GINGER T

ART UNIT

PAPER NUMBER

3761

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

03/22/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/749,761

Applicant(s)

VAN GOMPEL ET AL.

Examiner

Ginger T. Chapman

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 1-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 31-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/28/07 & 9/6/06.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### **Status of the claims**

Claims 1-46 are pending in the application, claims 1-30 are withdrawn from consideration as being drawn to a nonelected invention.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 31, 32, 35, 36, 38, 40, 41 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishima (US 6,913,599) in view of Freeland (US 4,990,147) and Ono (US 6,547,774) and further in view of Mormon (US 2003/0125696 A1).

With regard to claim 31 Mishima discloses a disposable absorbent garment (fig. 1) comprising: an outer layer (5); an elastic inner layer (7) having a perimeter (7a, 7c); elastic inner layer (7) includes a front piece (20), a back piece (22) and a crotch piece (21), wherein the front piece and back piece are elastic in a lateral direction and the crotch piece is elastic in a longitudinal direction (c. 3, ll. 37-40); wherein the crotch piece defines an opening (8) located in an internal position to the elastic inner layer perimeter (fig. 1); and an absorbent assembly (6) positioned between outer layer (5) and elastic inner layer (7), wherein absorbent assembly includes a topsheet layer (c. 3, ll. 10-12) and a core layer (6).

Mishima discloses the elastic inner layer but does not expressly disclose the crotch piece is attached to the front and back pieces. Freeland, at c. 7, ll. 1-55 teaches the crotch piece

Art Unit: 3761

attached to the front and back pieces thus disclosing a desire for the crotch piece to be attached to the front and back pieces. As seen in Figures 4-6, Freeland teaches the elastic inner layer (12) having an opening (22) and the crotch pieces (32, 34) attached to front and back pieces (30, 38, 40). Freeland states that the advantage to forming the garment with this design is that the diaper pieces can be selected to more closely conform to the buttocks or genitalia of the wearer while permitting waste to pass through the opening to the void space and absorbent core thereby isolating fecal waste from the skin of the wearer thus providing a cleaner diaper (c. 7, ll. 40-60 and c. 1, ll. 5-15. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the elastic inner layer of Mishima having the crotch piece attached to the front and back pieces as taught by Freeland since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

Mishima discloses an absorbent assembly including a core and topsheet but does not expressly disclose a barrier layer. Ono et al, at c. 3, ll. 30-40 teach an absorbent assembly having a barrier layer thus disclosing the desire and motivation for a barrier layer. As seen in Figure 2, Ono et al disclose a diaper (1) having an absorbent assembly (3) including a topsheet layer (43), a core layer (42) and barrier layer (44). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the assembly of Mishima having a barrier layer as taught by Ono et al since Ono states at c. 3, ll. 35-65 that the benefit of making the absorbent assembly with this design is that the backsheet improves the strength of the absorbent assembly.

Art Unit: 3761

With regard to the limitation of the back waist region and the crotch region are elastically stretchable in different directions, in view of the instant specification at p. 18, ll. 15-16, the examiner is interpreting the claim language to indicate that both the waist and crotch are each stretchable in different direction but not in directions different from each other. Mishima discloses the crotch region is elastically stretchable in different directions to maintain close contact with the wearers crotch to prevent leakage, but does not teach the back waist region is elastically stretchable in different directions. Mormon et al, [0001-3] express the desire for a diaper that has increased stretchability in the waist and crotch to improve the fit and comfort of the diaper thereby preventing leakage from the diaper. As seen in Figure 1, Mormon et al teach a diaper (1) having a back waist region (50) and crotch region (48) that are elastically stretchable in different directions [0068-9]. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the back waist and crotch region of Mishima elastically stretchable in different directions since Mormon states at [0068-9] that the benefit of forming the diaper with this design is that this maintains a high level of fit to the wearers waist, buttocks and crotch while the diaper is being applied to and worn by the wearer.

With regard to claim 32, Mishima discloses the outer layer and elastic inner layer perimeter are bonded but does not expressly disclose the elastic inner layer perimeter is bonded to the outer layer perimeter. Freeland at c. 4, ll. 30-40 teaches it is known in the diaper art to bond the perimeter of the inner layer to the outer layer perimeter. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to bond the inner layer perimeter to the outer layer perimeter as is known in the diaper art since Freeland states at c. 4, l. 39-40 that such bonding affixes the elastic inner layer directly to the outer layer

Art Unit: 3761

and at c. 6, ll. 20-30 that bonding the perimeter of the layers provides wrinkle-free margins and provides a void space for isolating fecal matter from the skin of the wearer.

With regard to claim 35, Mishima discloses the outer layer (5) is liquid impermeable (c. 3, l. 9).

With regard to claim 36, Ono et al disclose the outer layer is liquid permeable (c. 2, ll. 45-61).

With regard to claim 38, Mishima discloses the elastic inner layer (7) is liquid impermeable (c. 3, l. 15).

With regard to claim 40, with regard to the limitation of the length of the opening being of from 10 % to 80 % of the total length of the garment, Mishima discloses the opening but does not expressly disclose the opening length as a percent of the total length of the garment. Freeland teaches at c. 4, ll. 55-60 that the length of the opening is a balance between the minimum size necessary to accommodate variations in the placement of the anus relative to the perineum and various cross sections of fecal material while minimizing undue skin contact with the waste material. Freeland further teaches at c. 6, ll. 50-65 that the opening can be made larger to obviate urine from being intercepted and retained against the skin of the liner and to accommodate both genitals and to permit urine to communicate to the core, and at c. 7, ll. 65-67 that the opening can be scaled for a particular size infant. Therefore the length of the opening is considered a result effective variable in the known process of varying diaper sizes in order to accommodate the size of the intended wearer and the volume of waste loading imparted by the intended use of the article. In view of this known teaching, to form the opening of Mishima as taught by Freeland would have been obvious to one of ordinary skill in the art at the time the

Art Unit: 3761

invention was made in order to provide a variety of absorbent capacities for the varying needs of the wearer since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch and Slaney*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

With respect to the limitation of 10% to 80% opening size, Applicant has provided no criticality for the specific opening to be 10% to 80%. The specification contains no disclosure of either the critical nature of the claim limitations nor any unexpected results arising therefrom, and that as such the limitations were arbitrary and therefore obvious. Such unsupported limitations cannot be the basis for patentability, since where patentability is said to be based upon particular dimensions or another variable in the claim, the applicant must show that the chosen variables are critical. *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ 2d 1934 (Fed. Cir. 1990). One having ordinary skill in the art would be able to determine the ideal length for an opening for a particular dimension diaper.

With regard to claim 41, Freeland discloses the elastic inner layer is bonded to the outer layer with a plurality of ultrasonic, adhesive or thermal bonds as is well known in the art (c. 4, ll. 35-40).

With regard to claim 43, Freeland discloses the outer layer length is greater than the elastic inner layer length (c. 5, ll. 10-18).

Claim 44 and 46 rejected under 35 U.S.C. 103(a) as being unpatentable over Mishima in view of Freeland ('147) and Ono and Mormon and further in view of Freeland (US 5,269,775).

With regard to claim 44, the combination of Mishima Freeland ('147) and Ono disclose the outer layer length greater than the inner layer length but does not expressly disclose the outer

Art Unit: 3761

layer width greater than the inner layer width. Freeland ('775) at c. 4, ll. 60-68 and c. 5, ll. 1-5 teaches the ability of the outer layer width being greater than the inner layer width such that the difference in lateral direction width between the outer and inner layer to foreshorten the inner layer relative to the outer layer thereby creating a void space therebetween to isolate fecal matter from the skin of the wearer. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the layers of Mishima having an outer layer width greater than an inner layer width as taught by Freeland ('775) in order to create a void space therebetween since Freeland states at c. 2, ll. 7-11 that the advantage to forming a garment with this design is that it isolates fecal matter from the skin of the wearer.

With regard to claim 46, Freeland ('775) discloses the absorbent assembly (26) attached to outer layer (24) along a lateral centerline of the absorbent as is well known in the art (c. 6, ll. 34-40).

Claims 33, 34, 42 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishima in view of Freeland ('147) and Ono and Mormon and further in view of Blenke et al (US 6,129,720).

With regard to claim 33, the Mishima discloses an outer layer but does not expressly disclose the outer layer is extensible. Blenke et al, at c. 1, ll. 40-45 expresses the desire for an extensible outer layer that permits the garment to extend and expand about the wearer and thus to better conform to the body of the wearer. As seen in Figure 2, Blenke et al teach the garment (8) having outer layer (26) that is extensible (c. 3, l. 6; c. 8, ll. 60-67). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the outer cover of Mishima extensible as taught by Blenke et al since Blenke state at c. 1, ll. 40-45

Art Unit: 3761

that the benefit of forming a diaper with this design is that an extensible outer layer that is extensible permits the diaper to better conform to the body of the wearer thus providing a better fitting diaper.

With regard to claim 34, Blenke et al disclose the outer cover (26) is elastic (c. 9, ll. 2-10).

With regard to claim 42, Blenke et al disclose the crotch portion (18) is extensible (42) (c. 5, ll. 17-18 and ll. 27-28).

With regard to claim 45, with regard to the limitation of the percentage of bonded area to unbonded area of from 10 to 40, Blenke discloses the elastic inner layer (24) bonded to outer layer (26). Blenke teaches at c. 12, ll. 40-60 that the percent unbonded to bonded area increases the extensibility of a substrate formed by the inner and outer layers. Blenke et al teach that the greater the percent unbonded area the greater the amount of stretchability there is of the outer layer and likewise the greater the percent bonded area the less amount of stretch is available for use of the diaper. Therefore the percentage of bonded to unbonded area is considered a result effective variable in the known process of selecting the extensibility of the layers. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the extensibility of the diaper of Mishima as a function of the percent bonded to unbonded area as taught by Blenke since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch and Slaney*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

With respect to the limitation of 10% to 40% bonded to unbonded area, Applicant has provided no criticality for the specific area to be 10% to 40%. The specification contains no

Art Unit: 3761

disclosure of either the critical nature of the claim limitations nor any unexpected results arising therefrom, and that as such the limitations were arbitrary and therefore obvious. Such unsupported limitations cannot be the basis for patentability, since where patentability is said to be based upon particular dimensions or another variable in the claim, the applicant must show that the chosen variables are critical. *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ 2d 1934 (Fed. Cir. 1990). One having ordinary skill in the art would be able to determine the ideal amount of bonded area for a particular dimension diaper.

Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mishima in view of Freeland ('147) and Ono and Mormon and further in view of Roe et al (US 6,482,191).

Mishima discloses the elastic inner layer but does not expressly disclose the layer includes two or more layers of materials. Roe, at c. 8, ll. 30-50 teaches ability of the elastic inner layer to include two or more layers of material thus expressing a desire for such layers. As seen in Figure 1, Roe et al teach a garment (20) having an elastic inner layer (24) including two or more layers of materials (c. 8, ll. 30-62). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the inner layer of Mishima including two or more layers of materials as taught by Roe et al since Roe states at c. 3, ll. 60-65 that the advantage to forming the inner layer of two or more layers of materials is that the inner layer can thus be fully or partially elasticated so as to provide a void space for containment of fecal material between the elastic inner layer and the absorbent assembly thereby isolating fecal matter from the skin of the wearer thus providing a more sanitary diaper.

Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mishima in view of Freeland ('147) and Ono and Mormon and further in view of Allen et al (US 5,037,416).

Art Unit: 3761

With regard to claim 37, Mishima discloses an outer layer but does not disclose the outer layer having one or more pleats. Allen, at c. 4, ll. 45-50 teaches the ability of the outer layer to be pleated thus disclosing the desire for pleats. As seen in Figures 1 and 2, Allen teaches a diaper (10) having outer cover (16) having pleats (50). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the outer cover of Mishima having pleats as taught by Allen since Allen states at c. 4, ll. 20-50 that the advantage of forming an outer cover with this design is that the pleats contract the marginal portions of the diaper thereby allowing the diaper to better conform to the body of the wearer thus providing a better fitting diaper.

### *Response to Arguments*

Applicant's arguments with respect to claims 31-46 have been considered but are moot in view of the new ground(s) of rejection.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

Art Unit: 3761

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ginger T. Chapman whose telephone number is (571) 272-4934. The examiner can normally be reached on Monday through Friday 9:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ginger Chapman  
Examiner, Art Unit 3761  
3/16/07



**TATYANA ZALUKAEVA**  
**SUPERVISORY PRIMARY EXAMINER**